



The University of Southern Queensland

Course Specification

Description: Mathematics Honours Project B

Subject	Cat-Nbr	Class	Term	Mode	Units	Campus
MAT	4101	14381	2, 2002	ONC	2.00	TWMBBA

Academic Group:	FOSCI
Academic Org:	FOS003
HECS Band:	2
ASCED Code:	010101

STAFFING

Examiner: Tony Roberts

Moderator: Paul Fahey

PRE-REQUISITES

Pre-requisite: MAT 4100

RATIONALE

An in-depth project and thesis are necessary to prepare graduates for further research and responsible jobs in mathematics and its applications. This course in conjunction with MAT4100, Mathematics Honours Project A, enables students to develop research capability and an advanced level of mathematical skills for that purpose.

SYNOPSIS

This course forms the second half of the research training component of the Mathematics Honours program. A selected project in applied mathematics or statistics will be completed with supervision by appropriate staff from the Department of Mathematics and Computing. The project will consist of review and research into a well defined area of mathematics and its application. Information and ideas will be gathered, organised, analysed and discussed in a critical and evaluative manner. The topic of the project and report will be selected in consultation with the staff of the Department.

OBJECTIVES

On successful completion of this course students will be able to:

- demonstrate the ability to develop higher level mathematical or statistical skills which include the analysis, synthesis and evaluation of factors involved in the project;

- demonstrate the ability to complete an extensive research based project and evaluate the results;
- effectively document and communicate the results of the project and the methods used.

TOPICS

Description	Weighting (%)
1. Candidates will complete a supervised research project in consultation with appropriate Mathematics staff.	100.00

TEXT and MATERIALS required to be PURCHASED or ACCESSED:

Books can be ordered by fax or telephone. For costs and further details use the 'Book Search' facility at <http://bookshop.usq.edu.au> by entering the author or title of the text.

To be advised depending on the research project.

REFERENCE MATERIALS

Reference materials are materials that, if accessed by students, may improve their knowledge and understanding of the material in the course and enrich their learning experience.

Appropriate material from: - books, monographs - journals and conference proceedings - computer software and material from electronic sources.

STUDENT WORKLOAD REQUIREMENTS

ACTIVITY	HOURS
Project Work	310
Supervisor Consultation	30

ASSESSMENT DETAILS

Description	Marks Out of	Wtg(%)	Required	Due Date
SEMINAR	5.00	5.00	Y	22 Jul 2002 (see note 1)
DISSERTATION	95.00	95.00	Y	22 Jul 2002 (see note 2)

NOTES:

1. The Examiner advise students of the date of the seminar.
2. The Examiner advise students of the due date for the dissertation.

OTHER REQUIREMENTS

- 1 In accordance with University's Assignment Extension Policy (Regulation 5.6.1), the examiner of a course may grant an extension of the due date of the dissertation in extenuating circumstances. This policy may be found in the USQ Handbook, the Distance Education Student Guide and the Faculty of Sciences' Orientation Handbook for new on-campus students. All students are advised to study and follow the guidelines associated with this policy.
 - 2 It is the student's responsibility to make themselves available for consultation with their supervisor to ensure the best chance of meeting the objectives of the course.
 - 3 The entire project of which this course forms a component will normally proceed through the following stages: (i) Project Proposal (a short document should be prepared), (ii) Preliminary Seminar, (iii) Plan (another document should be prepared), (iv) Consideration of ethics, including the obtaining of ethical clearance, if necessary, (v) Literature and Resource review, (vi) Final Seminar, (vii) Dissertation. Some of these stages may be skipped when appropriate. The last item, the dissertation, will always be required and will contribute 95% to the assessment. The first course (MAT4100) will normally include items (i) to (iv) and the second course (MAT4101) will normally include items (v) to (vii).
 - 4 The dissertation will be assessed on the demonstrated quality of: incorporation of established knowledge; assimilation of research literature; scientific techniques; innovation; and technical writing.
-